

WHAT IS CLAIMED, IS

1. Method for detecting a wobble signal, **characterized** in that it comprises the steps of:
 - 5 comparing an input signal (IS) comprising the wobble signal (WS) with a reference signal (RS), the reference signal (RS) corresponding in phase and frequency to the desired wobble signal; and
 - outputting an output signal (OS) indicating the amplitude and the phase of the wobble signal.
- 15 2. Method according to claim 1, **characterized** in that the comparing step comprises the step of generating a sum signal (S1) and a difference signal (S2) of the input signal (IS) and the reference signal (RS).
3. Method according to claim 2, **characterized** in that the comparing step further comprises the step of further processing said sum signal (S1) and said difference signal (S2).
- 20 4. Method according to claim 3, **characterized** in that the further processing comprises one of absolute value calculation and phase sensitive rectification.
- 25 5. Method according to claim 3, **characterized** in that the comparing step further comprises the step of generating a further difference signal (DS) of said processed sum signal (S1) and said processed difference signal (S2).
- 30 6. Method according to claim 3, **characterized** in that the comparing step further comprises the step of integrating said further processed sum signal (A1) and said further processed difference signal (A2) over a wobble period.

7. Method according to claim 5, **characterized** in that the comparing step further comprises the step of integrating said further difference signal (DS over a wobble
5 period.

8. Method according to claim 1, **further comprising** the step of calculating the reference signal (RS).

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9. Method according to claim 1, **further comprising** the step of storing the reference signal (RS) in a table.

15 10. Method for detecting a wobble signal, **characterized in that** it comprises performing a method according to any of claims 1-9 in parallel for a plurality of reference signals (RS) having different wobble frequencies.

20 11. Apparatus for reading from and/or writing to recording media, **characterized in that** it comprises means for performing a method according to any of claims 1-10.